NATIONAL NUMBERING PLAN

AND

LIST OF NUMBERING RESOURCE ALLOCATIONS AND ASSIGNMENTS

NATIONAL NUMBERING PLAN	Version	**Version 16**
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CONTENTS

DEFINITIONS

"**Administration of Numbering Resources"** means the set of activities associated with the Assignment, Designation, and the oversight and monitoring of Numbering Resources, whose Allocation is established in the Numbering Plan.

"**Allocation**" means the attribution of the purpose and quantitative capacity of sets of Numbering Resources established in Numbering Plan.

"**Assignment"** means the allotment of Numbering Resources previously allocated in a Numbering Plan for a given telecommunications service provider or end-user.

"**Assignment Guidelines**" Assignee" means a person (natural or legal) to whom an assignment of numbers is made.

"End user" means a person who utilizes telecommunications services by assigned numbering resources.

"**Facilities-based Service Provider**" means a service provider who owns and operates the telecommunications network facilities used in the provision of a specified service.

"Freephone" means telephone service whereby a subscribing organization can pay for the incoming calls made by its clients or customers.

"**National Numbering Plan**" means the identification of the framework for allocation of ordinary numbering blocks, carrier identification codes, short codes, and other unique numbering resources to different applications and categories of resource

"**Primary assignment**" means the assignment of numbering resources by the BOCRA to individual companies and service providers.

"**Public Land Mobile Network"** means a combination of wireless communication services offered by a specific operator in a specific country

"Public Switched Data Networks" means a publicly available network supporting packet-switched data, separate from the Public Switched Telephone Network.

"Public Switched Telephone Network" means is the aggregate of the world's circuit-switched telephone networks that are operated by national,

regional, or local telephone operators, providing infrastructure and services for public telecommunication

“Secondary assignment” means the assignment of numbering resources by recipients of a primary assignment to their customers.

“Shared calls” means is the sharing of a phone number across multiple devices in different locations

ACRONYMS

CRA Act	Communications Regulatory Authority Act
BOCRA	Botswana Communications Regulatory Authority,
CRASA	Communications Regulators Association of Southern Africa.
CC	Country Code
DNIC	Data Network Interface Codes
IoT	Internet of Things
ISPC	International Signalling Point Codes
M2M	Machine to Machine
MNC	Mobile Network Codes
MCC	Mobile Country Code
MNO	Mobile Network Operator
NCC	Network Colour Codes
NSPC	National Signalling Point Codes
NNP	National Numbering Plan
PRS	Premium Rate Services
PLMN	Public Land Mobile Network (PLMN)
PSDN	Public Switched Data Network
PSTN	Public Switched Telephone Network (PSTN)
SADC	Southern Africa Development Community
SPC	Signalling Point Code
USSD	Unstructured Supplementary Service Data
VANs	Value Added Network Service providers
VoIP	Voice Over Internet Protocol

1. INTRODUCTION

1.1 Section 38 of the Communications Regulatory Authority Act of 2012, grants Botswana Communications Regulatory Authority (the Authority or BOCRA) the mandate to maintain a Numbering Plan and other telecommunication numbering resources used in Botswana.

1.2 In fulfilling this statutory mandate, BOCRA is required to develop a National Numbering Plan (NNP) for the efficient use of the numbering resources of telecommunications services and ensure adherence to the plan regarding the allocations and assignments of the numbering resources to the service providers. To achieve this mandate BOCRA shall:

1.2.1 Ensure that the National Numbering Plan, where applicable, will ensure that it is compatible with relevant Numbering Plan Standards and Industry Guidelines, International Agreements, Standards and Recommendations.

1.2.2 Manage the National Numbering Plan Allocations and Assignments to ensure that there are enough numbers available to meet current and reasonably anticipated future demands of services.

1.2.3 Ensure that there is equity, efficiency and transparency in the allocation and primary assignment of numbers, and that costs to service providers and consumers are objectively justified.

2. PURPOSE

2.1 The purpose of the National Numbering Plan is to ensure transparent, non-discriminatory and efficient use of numbers. This practice assures service providers and end-users of excellent provision and consumption of telecommunications services.

3. BACKGROUND

3.1 BOCRA adopts the principles and procedures, in the form of administration of Numbering Policies, Numbering Plan Code of Conduct and Numbering Database that govern the way numbering resources are allocated and assigned. These administrative mechanisms promote fair and efficient allocation, assignment and use of numbering resources. This shall provide BOCRA and the Service Providers with a management platform and the end users with specific identification of their respective services in relation to the numbering plan.

4. THE NATIONAL NUMBERING PLAN (NPP)

4.1 The National Numbering Plan is pictorially illustrated in **Table 1** and **Figure 1**. Table 1 is the matrix for allocation of all numbers i.e., Fixed, Mobile, Short Codes, and other unique numbering resources. These are described in detail in the following sections.

Table 1: The National Numbering Plan

First digit	Second digit									
	0	1	2	3	4	5	6	7	8	9
0	Int'l	Short international dialing in region							0800 & 08XX	
1	Short Codes									
2	NG	Geographic Numbering (Francistown region)								
3	NG	Geographic Numbering (Gaborone)								
4	NG	Geographic Numbering (Palapye region)								
5	NG	Geographic Numbering (South-east region)								
6	NG	Geographic Numbering (North and west regions)								
7	Mobile Numbering									
8	Non-Geographic Numbering (M2M and Mobile)									
9	PRS	91X	Reserved							99X

4.2 Unique Numbers and Short Code numbers

4.2.1 Level 0 - International Access and Freephone Numbers

Levels 0 is used for international access (**00**), the freephone numbers commencing with **0800** and shared calls were allocated the **08XX** numbering range.

4.2.2 Levels 1 - Short Codes

Level 1 is used for the Short Codes. Short codes are short telephone numbers classified into three categories being Types A, B and C. The numbers occupy the 1XX, 1XXX and 1XXXX number blocks i.e., three or four- and five-digits long numbers. Refer to Table 2.

Table 2: Summary of Types of Short Codes

Short Code Types	Services and attributes	Length of number digits
Type A	Nationally important services including emergency numbers	3 digits long emergency services
Type B	Across net services i.e., accessed through all public MNOs	5 digits long:16XXX, 17XXX, 18XX(X) and 19XXX number blocks.
Type C	On-Net services and can have same number for different services within the network.	10X(X), 11XX, 12X(X).

4.2.3 Level *1 and *2 - USSD codes.

The levels *1 and *2 are used for the USSD codes which currently occupy the *1XX*XXX# and *2XX*XXX# numbering blocks.

4.2.4 Levels 1 and 9 - Emergency Numbers

Level 1 and part of level 9 is used for the emergency numbers. The emergency numbers occupy the 110-116, 99X and 91X numbering blocks. Reference is made to Table 3 below being a list of Emergency Service Providers**.**

Table 3: Assigned Emergency Numbers

Service Provider	Emergency Number
All Emergencies	112
ChildLine Botswana	116
Emergency Assist	991
MedRescue International	992
Rescue One	993
Boitekanelo Medical Services	994
Okavango Air Rescue	995
Fire	997
Ambulance	998
Police	999
MedRescue International	911
Medflex	914

4.2.5 Premium Rate Services

The Premium Rate Services (PRS) in level 09 remains unused and remains reserved for this service.

4.3 Fixed Numbers

4.3.1 Levels 2 to 6: Fixed numbers

Level 2 to 6 are the seven (7) digits long geographical numbers occupying the numbering range from 2XX XXXX to 6XX XXXX respectively providing services to fixed line services. Reference is made to **Table 4 and Figure 1** below. This, however, excludes the following selected numbers on the second- and third-digit levels zero e.g., 200 0000, 300 0000, 460 0000, 530 0000, 680 0000 which are reserved.

Table 4: Fixed numbers by the geographical location

Geographical Area	*Number range*	*Zone*
Francistown Area	24X XXXX	4
Selebi-Phikwe Area	26X XXXX	4
Letlhakane/Orapa Area	29X XXXX	4
Gaborone Area	3XX XXXX	1
Serowe Area	46X XXXX	3
Mahalapye Area	47X XXXX	3
Palapye Area	49X XXXX	3
Ramotswa/Lobatse Area	53X XXXX	2
Barolong/Ngwaketse Area	54X XXXX	2
Mochudi Area	57X XXXX	2
Jwaneng Area	58X XXXX	2
Molepolole Area	59X XXXX	2
Kasane Area	62X XXXX	5
Ghanzi/Kgalagadi Area	65X XXXX	5
Maun Area	68X XXXX	5

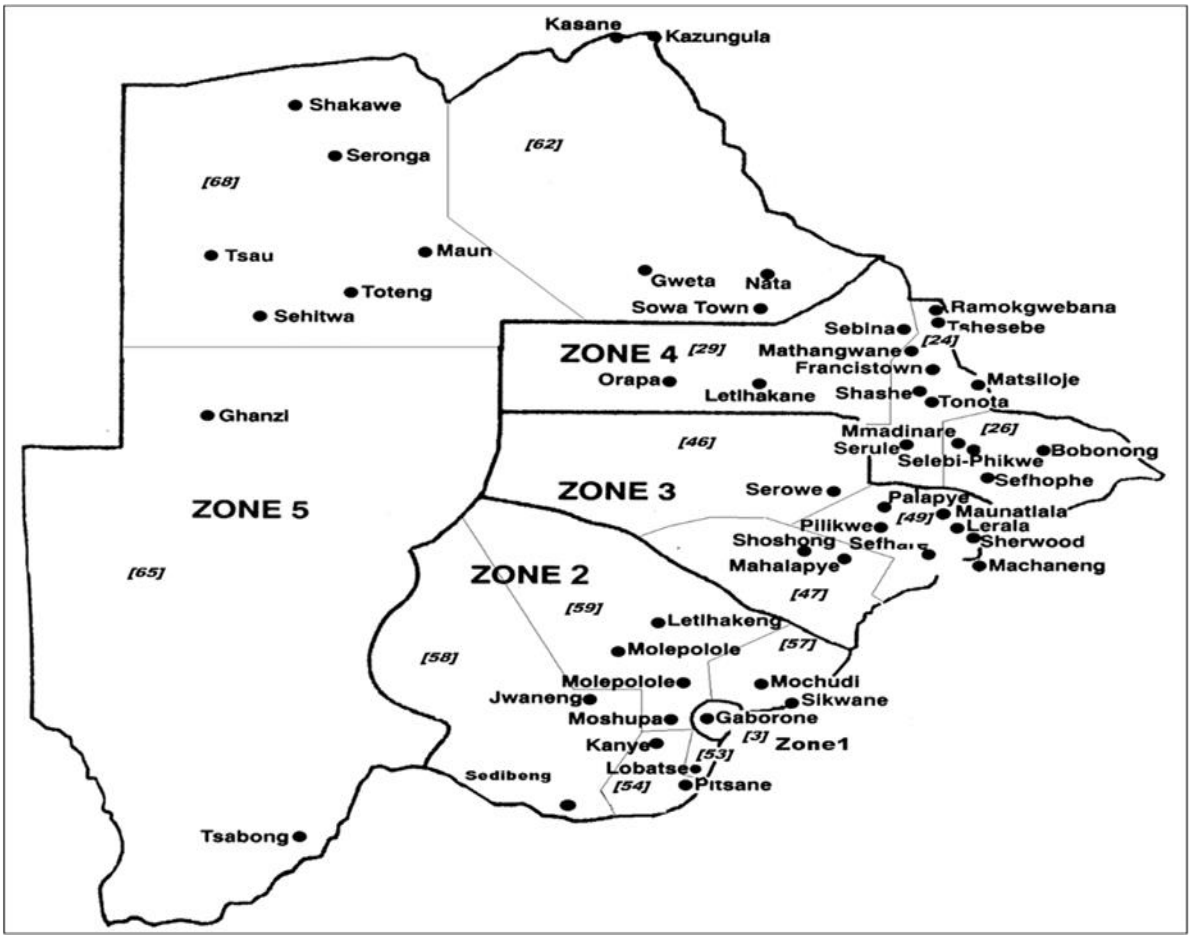

Figure 1: Geographical Demarcations of the Fixed Numbers

4.4 VOIP NUMBERS

4.4.1 Level 7

The level 7 range of 79 XXX XXX is allocated for VoIP numbering services.

4.5 MOBILE NUMBERS

4.5.1 Level 7 and 8

Levels 7 and part of Level 8 are an eight digits long mobile number range from :71 XXX XXX to 78 XXX XXX ; and
81 XXX XXX to 85 XXX XXX respectively.

4.6 MACHINE TO MACHINE COMMUNICATIONS (M2M)/IOT

4.6.1 Level 8

The M2M communications is a 10 digit long numbering range that occupies numbering range from 86 XXXX XXXX to 89 XXXX XXXXX and supports the Internet of Things devices.

5. OTHER NUMBERING RESOURCES

5.1 The other numbering resources that enable seamless communications services and these are the known as Codes reference is made to table 5 below. These codes are listed as in the ITU Recommendation ITU-T E.164.

Table 5: Instrumental Codes

Important Codes	Relevance and Use
Country Code (CC)	267
Mobile Country Code (MCC)	652
National Signalling Point Codes	network interconnection purposes
Data Network Interface Code (DNICs)	X25 data networking
Network Colour Codes (NCC)	GSM base station identifiers
Mobile Network Code (MNC)	Public networks
International Signalling Point Code (ISPCs)	International signalling and it uses a 3-8-3 ITU format standard.

5.2 Mobile Network Code

There are three (03) Mobile Network Code (MNC) used in the networks of the Mobile Network Operators (MNOs) and these are allocated in accordance with the ITU Recommendation ITU-T E.212. Reference is made to table 6 below.

Table 6: Mobile Network Codes

Mobile Network Codes	Mobile Network Operator
01	Mascom Wireless
02	Orange Botswana
04	BTCL

5.3 The International Signalling Point Codes

These codes are used for the international signalling and are represented using a ITU 3-8-3 format. There are currently 6 spare ISPCs for Botswana. The following are assigned codes to Botswana for use as tabulated below.

Table 7: International Signalling Point Codes for Botswana

International Signalling Point Code (ITU 3-8-3 Format)	MNO Assigned
6-104-0	Botswana Telecommunications Corporation Limited (BTCL)
6-104-1	Botswana Telecommunications Corporation Limited (BTCL)
6-104-2	Mascom Wireless
6-104-3	Orange Botswana
6-104-4	Orange Botswana
6-104-5	Botswana Telecommunications Corporation Limited (BTCL)
6-104-6	Botswana Telecommunications Corporation Limited (BTCL)
6-104-7	Mascom Wireless
6-105-0	Mascom Wireless
6-105-1	Mascom Wireless
6-105-2	Spare
6-105-3	Spare
6-105-4	Spare
6-105-5	Spare
6-105-6	Spare
6-105-7	Spare

6. NUMBERING ALLOCATIONS AND ASSIGNMENTS

6.1 Application for Number

6.1.1 All operators of a Public Switched Telephone Network (PSTN), Public Land Mobile Network (PLMN), or a Public Switched Data Network(PSDN), providing, or intending to provide within a specified time, publicly available telephone services, and owning and operating a public telecommunication system, are eligible to apply for primary assignments of telephone numbering capacity, subject to

satisfying an eligibility criterion specified in the Numbering Policy, Code of Conduct and other relevant standard specifications such as the International Telecommunications Union's ITU-T Recommendations.

6.1.2 Non-facilities-based service providers may seek a secondary assignment from an eligible service provider unless the Authority advises otherwise. However, secondary assignments shall be made in an efficient and non-discriminatory manner.

6.2 National Number Allocations

6.2.1 The table 8 shows the 8 digits active mobile number allocations across all the three MNOs.

Table 8: Mobile Number Allocations as of August 2023

Mobile Network Operator	Mobile Number Range	Quantity Allocated
Mascom Wireless	71 000 000 – 71 999 999 74 000 000 – 74 299 999 74 500 000 – 74 799 999 75 400 000 – 75 699 999 75 900 000 – 75 999 999 76 000 000 – 76 299 999 76 600 000 – 76 799 999 77 000 000 – 77 199 999 77 600 000 – 77 799 999 77 800 000 – 77 899 999	1,000,000 300,000 300,000 300,000 100,000 300,000 200,000 200,000 200,000 100,000
Orange Botswana	72 000 000 – 72 999 999 74 300 000 – 74 499 999 74 800 000 – 74 899 999 75 000 000 – 75 399 999 75 700 000 – 75 799 999 76 300 000 – 76 599 999 76 900 000 – 76 999 999 77 300 000 – 77 599 999 77 900 000 – 77 999 999 78 000 000 – 78 199 999 78 200 000 – 78 499 999 78 500 000 – 78 799 999	1,000,000 200,000 100,000 400,000 100,000 300,000 100,000 300,000 100,000 200,000 300,000 300,000
Botswana Telecommunications Corporation Limited (BTCL)	73 000 000 – 73 999 999 74 900 000 – 74 999 999 75 800 000 – 75 899 999 76 800 000 – 76 899 999 77 200 000 – 77 299 999	1,000,000 100,000 100,000 100,000 100,000

6.2.2 The table 9 below shows the 8 digits active VoIP numbering allocations made to both the MNOs and the VANs:

Table 9:VoIP Numbers as of August 2023

Service Provider	*VoIP Number range*	*Quantity Allocated*
Virtual Business Network Services	79 100 000 – 79 100 999	1,000
AfriTel	79 101 000 – 79 101 999	1,000
Global Broadband Solutions	79 102 000 – 79 102 999	1,000
Business Solutions Consultants	79 103 000 – 79 103 999	1,000
Dimension Data	79 104 000 – 79 104 999	1,000
OPQ Net	79 105 000 – 79 105 999	1,000
Mega Internet	79 106 000 – 79 106 999	1,000
Stature (OpenVoice)	79 107 000 – 79 107 999 79 113 000 – 79 113 999	2,000
Tsagae Communications	79 108 000 – 79 108 999	1,000
MicroTeck Enterprises	79 109 000 – 79 109 999	1,000
Microla Botswana	79 110 000 – 79 110 999	1,000
Internet Options Botswana	79 111 000 – 79 111 999	1,000
FDI Foneworx	79 112 000 – 79 112 999	1,000
MTN Business Solutions	79 114 000 – 79 114 999	1,000
Abari Communications	79 115 000 – 79 115 999	1,000
Mission Communications	79 116 000 – 79 116 999	1,000
ConceroTel	79 117 000 – 79 117 999	1,000
Paratus Africa	79 118 000 – 79 118 999	1,000
Blue Pearl Communications T/A ROI	79 119 000 – 79 119 999	1,000
Dapit Ventures T/A GCSat Botswana	79 120 000 – 79 120 999	1,000
Bantu Telecom	79 121 000 – 79 121 999	1,000
Paratus Africa	79 122 000 – 79 123 999	2,000
Netway Pty Ltd	79 124 000 – 79 125 999	2,000
Apicom Pty Ltd	79 126 000 – 79 126 999	1,000
Devaki Botswana	79 127 000 – 79 127 999	1,000
Liquid Intelligent Technologies	79 128 000 – 79 128 999	1,000
Orange Botswana	79 200 000 – 79 209 999 79 220 000 – 79 229 999	20,000
Botswana Telecommunications Corporation Limited (BTCL)	79 210 000 – 79 219 999	10,000
Mascom Wireless	79 230 000 – 79 279 999	50,000

Note noncoloured ranges are licensed SAP

6.2.3 The table 9 below shows the 10 number digits active Machine-to-Machine number allocations:

Table 10:M2M Number Allocations as of August 2023

Mobile Newtork Operator	M2M Number range	Quantity Allocated
Orange Botswana	890 000 0000 – 890 000 9999 89 0001 0000 – 89 0001 9999 89 0002 0000 – 89 0002 9999 89 0003 0000 – 89 0003 9999 89 0004 0000 – 89 0004 9999 89 0018 0000 – 89 0018 9999 89 0019 0000 – 89 0019 9999 89 0020 0000 – 89 0020 9999 89 0021 0000 – 89 0021 9999 89 0022 0000 – 89 0022 9999 89 0023 0000 – 89 0023 9999 89 0024 0000 – 89 0024 9999 89 0025 0000 – 89 0025 9999 89 0026 0000 – 89 0026 9999 89 0027 0000 – 89 0027 9999 89 0028 0000 – 89 0028 9999	10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000
Botswana Telecommunications Corporation Limited (BTCL)	890 005 0000 – 890 005 9999 89 0006 0000 – 89 0006 9999 89 0007 0000 – 89 0007 9999 89 0008 0000 – 89 0008 9999 89 0009 0000 – 89 0009 9999 89 0069 0000 – 89 0069 9999	10,000 10,000 10,000 10,000 10,000 10,000
Mascom Wireless	89 0010 0000 – 89 0010 9999 89 0011 0000 – 89 0011 9999 89 0012 0000 – 89 0012 9999 89 0013 0000 – 89 0013 9999 89 0014 0000 – 89 0014 9999 89 0015 0000 – 89 0015 9999 89 0016 0000 – 89 0016 9999 89 0017 0000 – 89 0017 9999	10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000

Note ALL Allocations made in blocks of 10,000 numbers

6.2.4 The table 11 below shows the 7 number digits active Fixed Number Allocations:

Table 11: Fixed Number Allocations as of August 2023

Number Blocks	**Orange Botswana**	**Mascom Wireless**	**BTCL**
2XX XXXX	-	60,000	300,000
3XX XXXX	-	60,000	500,000
4XX XXXX	-	30,000	300,000
5XX XXXX	-	60,000	500,000
6XX XXXX	-	30,000	300,000
Sub-Total	-	**240,000**	**1,900,000**

7. CONCLUSION

7.1 The National Numbering Plan is a way of ensuring that:

7.1.1 The limited numbering resources are used prudently and efficiently and this allows for effective number management. This exercise enables customers to have access to services using numbers without undue expense and inconvenience, and to ensure that all service providers have the numbering resources they need to compete in the rapidly growing telecommunications marketplace with the associated proliferation of new telecommunications technologies and services; and

7.1.2 There is equity, efficiency, and transparency in the allocation of numbers as this is done objectively within the confines of the CRA Act of 2012.

End.